

YELLOWTHROATED BULBULS AT HORSLEY HILLS¹

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(With a text-figure)

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Yellowthroated Bulbul *Pycnonotus xantholaemus* was studied at Horsley Hills to gather details on its abundance, habits, food and feeding behaviour. Compared to other congeneric species, *P. xantholaemus* was the most abundant on the hills. The species occasionally moved in groups of six birds though pairs were more common. The diet of the species consisted of berries and insects. The birds adopted different methods to capture insects, though aerial feeding was most common. Aggressive interactions with conspecifics and other species were noticed. Though *P. xantholaemus* resembles *P. luteolus* closely with respect to certain habits and call notes, distinct differences were noticed.

INTRODUCTION

The Yellowthroated Bulbul *Pycnonotus xantholaemus* (Jerdon) is an endemic species, restricted to South India (Ali and Ripley 1987, Gaston 1984, Ripley 1955) and very little is known on its habits (Ali and Ripley 1987). Much of what is known on the habits of this species comes from the observations made at Horsley Hills by P. Roscoe Allen (1908). But for the observations of Ali (1942) which threw light on the habitat type and food habits, not much has been added to the knowledge of this species (Ali 1969, Ali and Ripley 1987, Baker 1922, 1932) since Allen (1908). In following up the observations of Roscoe Allen, we visited Horsley Hills between 17-20 October 1991 to add to the present knowledge of this species as part of our study on *P. xantholaemus* (Subramanya *et al.* 1990, 1991).

Though ornithologically, very little is known about Horsley Hills (e.g. Allen 1908), Whistler and Kinnear (1932) indicate that this may have possibly been the location where Jerdon (1863) obtained the type of specimen of *P. xantholaemus*. The two specimens from Horsley Konda (Horsley Hills) presently in the collection of Bombay Natural

History Society (Abdulali 1982, BNHS reg. nos.: 2062 and 2063) are those collected by Roscoe Allen on 29 April and 22 May 1908, respectively.

STUDY AREA

Horsley Hills (13° 41' N, 78° 28' E), in Chittoor District of Andhra Pradesh, so named after Mr. M.W.H. Horsley, a member of Indian Civil Service of the erstwhile British Raj, is part of a range of hills in the Eastern Ghats. The presence of crude fortification vestiges, indicate that at one time, it had great local importance. Though the habitat is predominantly of dry deciduous type, a small patch of moist deciduous forest still exists. With the upgradation of its status as a hill resort, the developmental activities and a large scale *Eucalyptus* plantation in 1963 seems to have wrought changes to the habitat. In the areas around the habitations and along the road *Eucalyptus* has been planted in small patches. Whatever wild vegetation exists today is much disturbed. Though a meshed fence has been erected on either side of the road, villagers from neighbouring areas stray into the protected area for wood cutting and their cattle can also be seen frequenting the outer hills for grazing. However, good natural tree vegetation exists in places where the approach has been made inaccessible due to the dense growth of *Lantana*. In certain places, slopes are thickly covered with grass.

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METHODOLOGY

Horsley Hills was visited between 17-20 October 1991 and the hill area was traversed on foot and detailed notes were maintained on the relative abundance of all congeneric bulbuls seen, food and foraging habits, group size and other behavioural observations on *P. xantholaemus*.

RESULTS AND DISCUSSIONS

Relative Abundance of bulbuls: During the observation period, four species of bulbuls, namely *P. cafer*, *P. jocosus*, *P. luteolus* and *P. xantholaemus* were recorded. A total of 158 bulbuls were sighted. In their relative abundance of different *Pycnonotus* species, *P. xantholaemus* was the most abundant species, while *P. cafer* had the lowest relative abundance (Fig. 1). Several authors have considered (e.g. Allen 1908, Ali 1942, Ali and Ripley 1987, Baker 1922) *P. xantholaemus* to be an uncommon species, but as it can be seen from the relative abundances of the four congeneric species, its

preferred habitat *P. xantholaemus* appears to be not so uncommon. Contrary to observation of Allen (1908), the species appears to be abundant not just towards the end of May, but throughout the year.

Though *P. cafer* and *P. jocosus* were seen around human habitations, *P. luteolus* and *P. xantholaemus* were found away from human disturbed areas and in densely vegetated boulder strewn regions of the hills. The Mission bungalow environs where Allen (1908) obtained his first of the two specimens, is no longer a favourite haunt of *P. xantholaemus*. Though *Ficus* trees in fruit were found within the compound of the bungalow, where we stayed during the study, *P. xantholaemus* were not sighted anywhere close by.

Group Size: On the hills *P. xantholaemus* occurred either singly or in groups of six birds. However, pairs were more common. The larger groups observed could be family parties, as in one instance, one of the birds in a group of six were seen feeding the other one, which could have been its own offspring in a subadult stage. It is not known how long the offsprings stay with their parents after fledging.

Food and Feeding Habits: Both insects and berries were observed being taken by *P. xantholaemus*. Of these 34 instances observed, *P. xantholaemus* took insects nearly 53% of the time and the rest comprised of fruits.

Insects were either captured aerially by hovering or by making a short sortie from a branch, or by gleaning leaves or bark of the plants. While capturing insects, the bird hopped from one branch to the other. Before taking up the next position, it scanned the section of the plant below and around it in a manner typical of a Leaf Warbler — crouching close to the branch on which it had perched and bending its head down or by turning its head sideways. On sighting an insect, the bird hovered vertically for a short time in front of a leaf or cluster of leaves. On the other occasions, it readily launched itself into a short sortie to take the insect or picked up the insect from the leaf or bark surface.

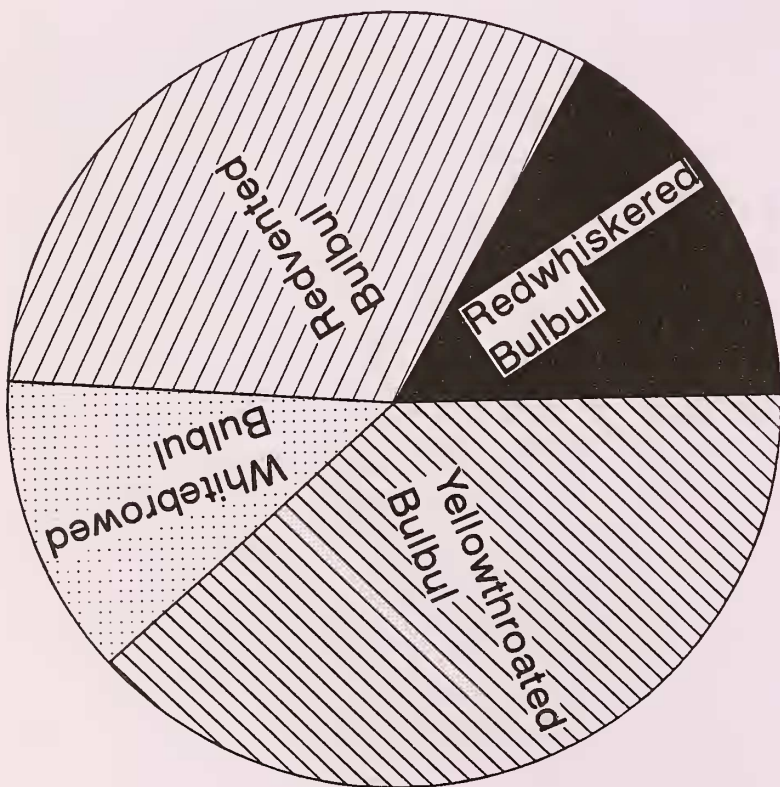


Fig. 1. Relative abundances of different species of bulbuls at Horsley hills. (17-20, October 1991; n=158).

On one occasion, an insect was captured by alighting on the ground and flying up a few inches to secure it. In all the cases observed, the prey captured were less than a centimetre in size, except once when about a three centimetre long caterpillar was gleaned from the bark. All successful insect captures ended with rubbing of the beak following feeding. Of the different methods adopted for capturing insects, flycatching was the most common method of insect capture by *P. xantholaemus*. However, this could very well be a seasonally induced behaviour owing to a preponderance of flying insects during our visit.

Once a pair of *P. xantholaemus* was observed foraging along with two *Terpsiphone paradisi*, two *Nectarinia lotenia*, *Prinia hodgsonii* and two *P. luteolus*. These birds were active in the canopy of a *Ficus* tree found amidst a dense growth of *Lantana*. When one of the authors (SS) approached the group to have a closer look, they moved away one after another into the dense canopy of a nearby tree instead of dispersing as expected, indicating that the pair was part of an active hunting party.

Only three types of fruits were observed being taken during our brief observation of which *Solanum indicum* made up nearly 61% of the fruits. *Ficus benghalensis*, *Santalum album* and *Zizyphus* were taken at a frequency of 22.2%, 11.1% and 5.6% respectively (n=18). Ali (1942) also obtained seeds of *Santalum* from the stomach of *P. xantholaemus* in Karnataka. Though *Solanum* berries with yellow, orange and red colours were available on the plant, the bulbuls were observed to select only the ripe red berries.

Interaction with conspecifics and other birds: During the study, *P. xantholaemus* were observed either chasing their conspecifics or other birds like *P. jocosus* and *Phylloscopus trochiloides*. Also, once a *P. luteolus* was also seen chasing a *P. xantholaemus* from a bush. Chasing of conspecifics occurred only in larger groups.

Chasing of other birds by *P. xantholaemus* seems to indicate resource defence behaviour as strong evidence of chasing *P. trochiloides*. This behaviour seems to indicate that *P. xantholaemus*

does not tolerate competing species whether for food or for other resources. The single instance of *P. xantholaemus* being chased by *P. luteolus* seem to indicate that the bulbuls (*Pycnonotus* species) defend locally established feeding territories. Instances of chasing each other while feeding within a group of *P. xantholaemus* probably indicate the presence of intraspecific competition which may act as precursor, a prelude to the breaking up of family groups in the post-breeding season.

At one of the observation sites, a radius of 20 m area was shared by one *P. cafer*, two *P. jocosus*, one *P. luteolus* and six *P. xantholaemus*. Though other species moved about a great deal, the movement of *P. xantholaemus* was much restricted and for about 45 minutes, they moved among a few selected trees and bushes within a radius of about 5 m. This area contained *Solanum indicum*, *Santalum album* and *Zizyphus* sp. which were in fruit and a three metre tall *Vitex* sp. in which a majority of the insects were captured.

Other Observations: Compared to *P. jocosus* which was distinctly arboreal and occupied perches from less than a metre in height to those about 30 m, all the movements of *P. xantholaemus* were restricted to less than 10 m from the ground. Here again, the activity was centred around spots with dense bushes, trees with large canopy and boulders. Allen (1908) indicates the species to be less shy and more arboreal than *P. luteolus*. It was observed that while in flight, the species often flies well clear of the tree tops and invariably flies into bushes or trees. When not disturbed, the birds were observed to perch openly on top of large boulders.

The call notes of this species can easily be mistaken for those of *P. luteolus* but with little experience, the chucklings of *P. xantholaemus* can be told apart as being less harsh and mellower than that of *P. luteolus* (see Subramanya *et al.* 1991).

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